Research Note

From myth to reality: Globalisation and public spending in OECD countries revisited

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Abstract. The prevailing but not unchallenged 'conventional wisdom' in the literature dealing with the impact of globalisation on public spending is that the effects of increased openness can be compensated through the welfare state. Repeatedly, studies have found little evidence for a 'race to the bottom' in taxation or spending. This research note shows that it is premature to conclude that globalisation has no negative impact on public spending. By extending the period of observation into the 2000s, by looking at changes in openness and spending instead of their levels, and by disentangling the effects of openness in the cross-sectional and over-time dimensions of variation, this article shows that the association between increased openness and spending is clearly negative. Although the contribution of this research note is mainly empirical, some theoretical arguments are presented, emphasising the long-term nature and complexity of policy making in the politics of globalisation.

The debate about the relationship between globalisation – that is, economic openness – and public spending has been going on for a long time. To anyone who has followed it even superficially, the competing theoretical and empirical claims are well-known. Often couched in terms of the 'efficiency' and 'compensation' theses, studies about the impact of international economic integration on domestic welfare state policies and public finances are abundant. Instead of reiterating the full theoretical debate, this research note focuses mainly on empirical findings.

More specifically, the current literature on the association between economic internationalisation and public spending will be reviewed briefly to show that such literature actually produces a quite coherent, albeit potentially biased, picture. While often framed as a response to the 'conventional wisdom' of an impending race to the bottom in taxes and welfare state expenditures, most of the studies find stronger support for the 'compensation thesis' (see below) – that is, a positive association between economic openness and public spending. In addition, the camp of globalisation sceptics, who emphasise the importance of domestic factors (e.g., structural change in the economy), is

growing (Castles 2004, 2007; Huber & Stephens 2001; Iversen & Cusack 2000; Iversen 2001). Instead of making new theoretical contributions, this article takes Campbell's suggestion as its point of departure: 'What If We Wait a Little Longer?' (Campbell 2004: 167). Given that the relationship between economic internationalisation and public spending is complex and ever-changing, it should be re-assessed repeatedly, at least as long as the process of globalisation continues to proceed with increasing momentum.

It will be shown that, contrary to the conclusions drawn in a sizable body of literature, economic openness has a clearly negative impact on public spending in OECD countries. The reason why most of the pertinent studies have not picked up on this effect is that they either focus on a time period in which globalisation effects have not played out yet or emphasise the cross-sectional instead of the over-time dimension. Hence, the negative association between openness and spending is being transformed here from a 'globalisation myth' (Garrett 1998a: 788) or 'paper tiger' (Castles 2004: 17) to reality.

The article proceeds as follows. Initially, I briefly review the current literature from an *empirical* perspective. Subsequently, I engage in some (constructive) criticism by pointing out the weaknesses of the body of research on the association between economic openness and spending. Then follows the empirical analysis, and, in the final section, the conclusion.

Globalisation and public spending: A brief literature review

Most of the established literature on the impact of globalisation is couched in terms of a debate on the 'efficiency' thesis versus the 'compensation' thesis (e.g., Garrett & Mitchell 2001; Garrett 2001; Swank & Steinmo 2002; Schulze & Ursprung 1999; Burgoon 2001). The efficiency argument posits that enhanced globalisation increases pressure on governments to lower taxes in order to prevent the exodus of mobile capital. Because the international integration of financial markets also punishes deficit spending, governments are pressed to reduce spending as well. The 'compensation' thesis, originally framed by David Cameron, Peter Katzenstein and, in a slightly different way, John Ruggie (Cameron 1978; Katzenstein 1985; Ruggie 1998: Chapter 2), argues that governments respond to economic internationalisation not by lowering public spending, but by increasing it. In something like a 'virtuous circle' (Garrett 1998a), governments expand the welfare state to cushion the deleterious impact of economic openness and external risk,[1] which in turn serves as an economic and political precondition for further economic integration (Adserà & Boix 2002).

Much of the pertinent literature (Garrett & Mitchell 2001; Quinn 1997; Garrett 1995, 1998a, 1998b, 2001; Swank & Steinmo 2002; Swank 1998, 2002; Bernauer & Achini 2000; Hays et al. 2005) is written as a response to the 'conventional wisdom' that expects a 'race to the bottom' in taxing and spending as a consequence of globalisation. Consequently, most of the studies find a positive or at least inconclusive relationship between different forms of economic openness (trade openness, capital mobility, financial openness) and public spending and/or taxation levels. Some studies (e.g., Garrett & Mitchell 2001; Burgoon 2001; Rodrik 1997) attempt to move beyond the simple dichotomy of 'efficiency' versus 'compensation' by offering a more nuanced and differentiated treatment of the impact of globalisation. Nevertheless, a certain asymmetry in favour of the 'compensation' argument lingers. For example, Garrett and Mitchell (2001: 176) – after having found a quite consistent negative association between trade openness and spending – conclude: 'Globalization has not induced a pervasive race to the bottom in welfare state regimes. Nor have governments responded to market integration by increasing their welfare state effort across the board.' Similarly, Rodrik (1997, 1998) is widely cited as an important representative of the modernised version of the 'compensation' thesis (e.g., Swank 2002: 31; Jahn 2006: 404, fn. 15) even though he found a negative association between trade openness and changes in spending. Finally, Burgoon (2001: 510), who also found some evidence of a negative relationship between openness and spending, is mainly concerned with 'patterns of compensation politics'.

As a consequence, most of the more recent innovative theoretical work has concentrated on the 'compensation' argument by alluding to the need to provide a better understanding of the political underpinnings of the compensation logic (Burgoon 2001; Kim 2007; Adserà & Boix 2002, Mares 2004, 2005). It is also important to note that the observation period in almost all of these studies ends in the mid-1990s – not out of theoretically motivated choice, but rather data availability.[2] Hence, if the process of economic internationalisation only gained momentum starting in the 1980s, as is often posited in popular and academic debates, the long-term effects of globalisation cannot show up in these studies.

Another field of literature deals with the debate on varieties of capitalism (Hall & Soskice 2001; Iversen & Soskice 2001; Iversen 2005). This debate emphasises the importance of specific welfare state policies in shaping the competitive profile of a national economy and suggests that increased pressure for competitiveness will result in the expansion and fortification of the welfare state in coordinated market economies, while it may well fuel further retrenchment in liberal welfare states (Iversen 2005; Swank 2002). Pierson, Castles and others have emphasised the resilience of welfare state policies and spending in

the face of economic globalisation (Castles 2004; Pierson 1994, 2001). Thus, the 'conventional wisdom' on the association between economic integration and spending, as reflected in the studies enumerated above, is not the elusive 'race to the bottom', but the continued relevance of domestic political institutions (Swank 2002; Swank & Steinmo 2002) and partisan politics (Boix 1998; Cusack 1997; Garrett 1998a, 1998b) as well as the general logic of the compensation thesis (Rodrik 1997, 1998; Stephens 2005).

Finally, the proponents of the 'efficiency' thesis cited in the literature present their case in qualitative case studies (e.g., Scharpf 1991; Kurzer 1991), in more general studies about the impact of globalisation on the changing balance of power between capital and labour in domestic politics (e.g., Scharpf & Schmidt 2000), or in 'the eloquent, if theoretically and empirically weak, writings of journalists and "kiss and tell" captains of industry and finance' (Burgoon 2001: 512). From a certain perspective, this may strengthen the case for the compensation thesis because the 'efficiency' camp has apparently not been able (or willing) to provide cross-country statistical evidence for their claims. However, the simple dismissal of a significant body of scholarly research about the effects of globalisation on various aspects of domestic politics forfeits the opportunity to fill theoretical gaps in the compensation argument.

The major exception is Jahn (2006: 402), who explicitly points out the importance of bringing new data to the analysis of the openness–spending relationship, because 'the effects of globalization are in flux'. In his analysis of social spending, he finds a distinct shift in the impact of globalisation between the tranquil 1980s and the turbulent 1990s that is generally in line with the 'efficiency' thesis (Jahn 2006: 427) – that is, a negative impact of openness on spending.[3] What is more, Garrett and others emphasise the continued importance of partisan politics in a globalised economy, while others (Kittel & Obinger 2003; Cusack 1997) have found a decreasing impact of partisan forces on spending outcomes that could be related to forces of economic integration. Furthermore, scholars have noted an ostentatious convergence of public spending in Western nations despite continued divergence in welfare state institutions and national responses to globalisation.[4] More qualitative studies on the impact of tax competition on national policy making have shown that competitive pressures on national policy makers exist even if they do not show up immediately in falling tax revenues (Genschel 2002; Ganghof 2005).

A (constructive) critique

The extensive literature on the association between economic globalisation and public spending has two major weaknesses. First, the observation periods

in almost all of the studies mentioned above end in the mid-1990s. Second, most of the studies look at the association between *levels* of globalisation and spending. However, if the dynamic aspect of globalisation really matters, we should adopt the model specification to our theoretical expectations – that is, we should look at the association between *changes* in openness and spending.

Coming back to the first point, we must ask ourselves what is to be gained by extending the period of observation from the mid-1990s to the early 2000s? My answer is twofold. First, the relationship between globalisation and public spending might change over time. The refusal to re-assess repeatedly the relationship between the two as long as the process of economic internation-alisation proceeds presupposes that this association was the same in the 1960s as it is today. From this perspective, the relationship between openness and spending is akin to a social law, whose validity is independent of time and space (Kittel 2006: 648) and has to be 'proven' only once. Quite a number of the studies enumerated above have used the statistical method of time-series cross-sectional analysis and tried to maximise the number of observations by going back as far as possible, often overlooking the possibility that this might result in a loss of information about changes in the relationships between variables. From a theoretical perspective, however, it is reasonable to expect that the impact of globalisation changes significantly over time (Ruggie 1997; Jahn 2006).

Second, the impact of economic internationalisation takes a considerable amount of time to show up in terms of policy outcomes. In this respect, John Campbell's notion of 'What If We Wait A Little Longer?' (Campbell 2004: 167) is as simple as it is persuasive. Policy making is a complex process and takes time. Policy makers are confronted with a multitude of demands from various constituencies, with owners of mobile capital being only one of them. The notion of the 'race to the bottom' as developed in the 'efficiency' camp implies a radically simplified and thus inadequate conception of the political process. In the political arena, demands from business have to compete with a variety of other demands. At the local or firm level, mobile capital owners might be able to extract wage concessions or make the local government come up with further subsidies, but at the national level, the exit threat of mobile capital has to be substantiated to be credible. In addition, policy makers have to weigh the diffuse exit threat of capital against concrete demands from other constituen-cies. Then, even if they decide to lower rates of corporate taxation, the lengthy process of tax reform might come too late to prevent the haemorrhaging of capital. Plus, corporate taxes are only one element in the decision-making process of firms. Firms might suffer more from increases in consumption taxes and nonwage labour costs necessary to finance reductions in corporate

taxation, depending on their mix of production factors and their position in the market.

The upshot of this illustration is that it would be premature to conclude that the effects of tax competition will be most prominent in the case of corporate taxation. The causal chain implied in the 'efficiency theory' (mobility of capital leads to a race to the bottom that, in turn, leads to welfare retrenchment) is too superficial and neglects the real-world complexities of political decision making.

It would be wrong, however, to conclude that increased economic internationalisation does not have an effect *in the long run*. To use a simple metaphor: when rain starts to fall on a dry haystack, it will take some time until the lower layers of the stack become wet, even if it rains continuously or ever more intensely. Similarly, the preceding examples are meant to illustrate the complexity and stickiness of the political processes connecting openness and spending decisions and to argue that the effects of globalisation on policy making can be expected to take a long time before they show up in policy outcomes. Furthermore, globalisation is a rather diffuse process that changes the balance of power between capital and labour in domestic politics. This shift in the balance of power is both incremental and pervasive.[5] It is incremental because it is not possible to divide history neatly into a pre- and post-globalisation phase (as is done by Jahn 2006). It is pervasive because it influences not only those policies deemed to be most affected by globalisation (i.e., corporate taxation), but also other policy areas only loosely related to globalisation. The *strength* of this effect is basically an empirical question. If it is real, the cross-national analysis of aggregate data ideally provides the bird's eye perspective necessary to detect it.

The second major deficiency of the literature cited above is that it does not distinguish consistently between the effects of globalisation in the cross-sectional and over-time dimensions. However, this distinction is crucial.

From a cross-sectional perspective, differences in economic openness capture the varying degrees to which countries are exposed to international markets. The original version of the compensation argument is rooted in the (cross-sectional) comparison of the welfare-state arrangements in small countries and their functional relationship to highly exposed economies (Cameron 1978; Katzenstein 1985). The 1970s and early 1980s were an era when economic internationalisation in product markets could be safeguarded through protective measures in financial markets and an interventionist welfare state (Huber & Stephens 1998). In this world, generous welfare-state policies could indeed provide the safety net needed to pursue more risky, but over the long term, potentially more rewarding, export-oriented production strategies (Adserà & Boix 2002; Ruggie 1997).

The process of economic internationalisation proceeded and intensified during the 1980s and 1990s. This new phase of economic globalisation fundamentally transformed the economic and political basis of the compensatory welfare state (Huber & Stephens 1998; Jahn 2006; Ruggie 1997). Governments were confronted with it more as a matter of fact than of choice, and it was often a 'soft and moving' target – that is, a far-reaching yet diffuse and elusive process. In this era, the international-level and internationalised markets became more important forces in economic policy making. The liberalisation of financial markets and the turn from demand- to supply-side economic policies exemplify this trend.

This periodicity of the process of economic internationalisation is the reason why it matters whether we look at the relationship between openness and spending in the cross-sectional dimension or in the over-time dimension. Differences in levels of openness in the 1970s and early 1980s reflect political choices of an era that was dominated by national-level politics and maintained quite an extensive set of policy instruments (e.g., credit, exchange rate, demand-side policies). However, *changes* in economic openness in the late 1980s and 1990s meant something quite different from differences in *levels* of openness in the early 1980s. When considering *changes* in openness, we are looking at the effects of an ongoing, intensifying process of economic internationalisation that differs substantially in character from the previous era. Even if one does not accept this argument uncritically, it is at least reasonable not to assume the contrary without further consideration, as is effectively done by injudiciously pooling observations in a TSCS framework.

From an empirical perspective, it is telling to revisit Rodrik's work (Rodrik 1997, 1998). In a cross-sectional regression of levels of trade openness on levels of spending in over 100 countries, he finds a strong positive association between openness and spending, confirming the compensation thesis. Yet, when looking at *changes* in a pooled time-series analysis of OECD countries, he finds a negative impact of openness on spending (Rodrik 1997: 62). This is no statistical quirk; it is systematically related to the analytical perspective. In a similarly comprehensive study, Garrett (2001) corroborates Rodrik's findings. Garrett also finds a positive association between openness and spending in a cross-sectional regression with a sample of over 100 countries, but a negative effect of changes in trade openness on changes in government spending. Garrett emphasises the need to look at changes instead of levels to identify the impact of increased openness more adequately (Garrett 2001: 19–20). Yet most studies, including work by Garrett and Mitchell (2001: 162–165), have used *levels* of spending as the dependent variable.[6]

To sum up these theoretical points, the overarching expectation is, contrary to the sizable literature on the 'compensation thesis', that globalisation has a

negative impact on spending. Yet even though this prediction is in line with the expectations of the 'efficiency' argument, I have argued that the theoretical underpinnings of the implied 'race to the bottom' logic are too simplistic and do not capture the real complexities of policy making. Instead, I have pointed to the need to assess the effects of economic openness from a *long-term* perspective because they take time to percolate through the policy-making process. Therefore, it is necessary and makes a difference to extend the period of analysis considerably to the present time. Finally, I have argued that it also makes a difference whether we look for globalisation effects in cross-section or over time. Differences in levels of openness could be remnants of an era when the opening up of the national economy was more a consequence of domestic political decisions and conditions than the pursuit of an encompassing, transformative and exogenous process. By looking at the impact that *changes* in openness have on *changes* in spending, we therefore gain a more accurate picture of the impact of the economic integration process as it dynamically unfolds over time.

Empirical analysis

Data and methods

This analysis employs different dependent variables to assess the impact of economic internationalisation. The classic measures used are total public spending and public social expenditure as a percentage of GDP.[7] I also include a measure of spending on social transfers (as a percentage of GDP). Following Castles' (2007) example, I add a residual category of 'non-social spending' (total public spending minus social spending) to find out whether the impact of trade openness varies between social and other types of spending.

The most important independent variable is, of course, economic openness. In most regressions, trade openness (average of exports and imports as a percentage of GDP) is used as the indicator for economic openness. This is because trade openness is probably the most common measure of the effects of economic internationalisation. While recent doubts about the relationship between openness and external risk/volatility have emerged (Kim 2007), trade openness regularly proves to be a more powerful determinant of policy outcomes than alternative measures of globalisation (Burgoon 2001; Garrett & Mitchell 2001: 149). To test the robustness of the findings, alternative indicators of economic globalisation (the KOF index of economic globalisation (Dreher 2006), net capital transfers as a percentage of GDP) are also tested. As controls I mainly include economic and demographic variables like unemployment,

inflation, economic well-being (national income per capita), the age dependency ratio (ratio of those aged 65 and above plus those younger than 15 to the working-age population), Iversen's indicator of de-industrialisation (Iversen & Cusack 2000; Iversen 2001, 2005) and (partly) female labour force participation. These variables are expected to capture the most important demand-side factors shaping the dynamics of public spending. In addition, I test for the influence of partisan factors. It could be expected that membership in the European Union both during and after the 1990s has had a negative impact on the growth of public spending because of the disciplining impact of the EU's Stability and Growth Pact. Therefore I include a dummy variable capturing the Maastricht effect.[8] Finally, a time trend variable is included.

As argued above, I expect significant differences in the impact of openness between the cross-sectional and over-time dimensions. Instead of pooling country-years and assuming a constant relationship between openness and spending across time and space, I first present the results of repeated simple cross-sectional regressions. Then I employ a dynamic model using first differences (see Kittel & Winner 2005; Beck 1991). In particular, I use two model specifications. The first is a pure first-difference specification, in which all independent variables are given in first differences. This specification captures the impact of short-term changes in independent variables on short-term changes in the dependent variable. The second specification is an error-correction model (ECM) (Beck 1991; for applications, see Iversen & Cusack 2000; Iversen 2001; Kaufman & Segura-Ubiergo 2001) with country fixed effects, in which independent variables are included both as first differences (changes) and lagged levels. The ECM specification allows us to differentiate between short-term, transitory effects (captured by the coefficients of the change variables), on the one hand, and long-term effects (captured by the coefficients of the lagged-level variables), on the other.[9] The decision to use first differences instead of levels for the dependent variable and the inclusion of country fixed effects in the ECM specification shifts the perspective from the 'pooled' model towards a 'within-effects' model, in which changes in the independent variables are used to predict changes in the dependent variable 'within' a given unit (country) instead of differences between units (countries). This choice of models is motivated by theoretical considerations because we are interested in capturing the impact of changes in openness on the dynamics (changes) in spending. A positive side-effect is that, in methodological terms, a first-difference specification is a 'statistically viable solution' to the often underestimated problem of non-stationarity (Kittel & Winner 2005: 278).[10] Additionally, panel-corrected standard errors (PCSE) are applied, as is common practice in time-series cross-sectional analyses (Beck & Katz 1995, 1996).

Results from cross-sectional analyses

Tables 1 and 2 present the results of repeated cross-sectional regressions for public and social spending, respectively. With a certain element of arbitrariness, the years 1980, 1985, 1990, 1995 and 2000 were chosen as points of reference. For each year, I present a reduced and a more encompassing model to demonstrate the robustness of the impact of trade openness on spending. Without going into too much detail, Table 1 shows that trade openness has indeed been an important determinant of public spending.[11] In 1980, each percentage-point increase in trade openness was associated with an increase of about 0.5 percentage points in public spending. The effect of trade openness was much stronger in terms of statistical significance than the effect of the other control variables. It reaches the 1 per cent significance level despite the low number of cases. The positive association between trade openness and public spending persisted throughout the 1980s, but in the 1990s the magnitude of the coefficient is roughly cut in half, and the statistical significance drops precipitously. In 2000, there is no longer any discernible statistical association between trade openness and spending. In equal measure, the share of explained variance (R^2) drops from a high of 0.70 in 1980 to only 0.25 in 2000 (for the reduced model: from 0.5 to 0.03 (!)), which indicates that trade openness, being the only significant determinant in 1980, has lost much of its explanatory power.

   A similar trend can be observed with regard to the association between trade openness and public social spending (Table 2). Here, too, the coefficient of trade openness is strongly positive and significant in 1980, persists for a while, but then drops during the 1990s. In general, the association between social spending and openness is less intense than the one with total public spending (indicated by the lower R^2 and the smaller magnitude of the coefficient). One should not read too much into this finding, but it could indicate that the welfare state might have been only one part of a compensation logic, if such logic was indeed at work in the early 1980s. In sum, there is significant evidence for the validity of the compensation thesis in the cross-sectional perspective, but as economic internationalisation increased and intensified during the 1980s and 1990s, the positive association between openness and spending disappeared.

Findings from time-series cross-sectional analyses

The results of time-series cross-sectional analyses are presented in Table 3. For each dependent variable, I test two model specifications: the first specification

Table 1. Cross-sectional regressions of public spending in OECD countries

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	— Total public spending, % of GDP, level									
	1980		1985		1990		1995		2000	
Trade openness	0.451	0.537	0.403	0.390	0.338	0.284	0.251	0.162	0.099	0.047
	(4.82)***	(6.41)***	(4.08)***	(4.67)***	(2.94)**	(2.49)**	(2.04)*	(1.27)	(0.88)	(0.44)
Unemployment	-0.937	-0.374	0.600	0.249	1.288	0.045	1.934	0.693	1.368	0.346
	(0.90)	(0.46)	(0.74)	(0.52)	(1.07)	(0.06)	(4.03)***	(1.32)	(1.78)	(0.67)
National income per capita	-0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000
	(0.04)	(2.04)*	(0.71)	(2.08)*	(0.92)	(1.57)	(1.68)	(1.41)	(0.15)	(0.48)
Age dependency ratio	0.466		-0.060		-0.273		-0.115		0.603	
	(1.23)		(0.16)		(0.50)		(0.18)		(0.87)	
De-industrialisation	0.465		-0.055		-0.237		-0.786		-0.317	
	(1.30)		(0.14)		(0.70)		(1.97)*		(0.66)	
Female labour force participation	0.209		0.178		0.417		0.744		0.452	
	(1.45)		(1.23)		(2.78)**		(3.32)***		(1.60)	
Constant	-27.444	17.171	13.130	18.740	14.484	20.780	10.013	18.499	-8.645	35.610
	(0.89)	(1.66)	(0.48)	(1.87)*	(0.45)	(1.50)	(0.36)	(1.33)	(0.26)	(4.04)***
Observations	19	19	19	19	19	19	19	19	19	19
R²	0.70	0.51	0.59	0.56	0.47	0.35	0.51	0.18	0.25	0.03

Notes: Robust t statistics in parentheses. * Significant at 10 per cent. ** Significant at 5 per cent. *** Significant at 1 per cent. New Zealand and Switzerland had to be dropped from the analysis due to missing data in the early 1980s. To keep the size of the sample consistent across the models, these two countries were not included in later periods.

Table 2. Cross-sectional regressions of public social spending in OECD countries

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Public social spending, % of GDP, level									
	1980		1985		1990		1995		2000	
Trade openness	0.181	0.200	0.201	0.196	0.155	0.133	0.102	0.086	0.037	0.026
	(2.47)**	(3.38)***	(3.04)***	(4.11)***	(1.97)*	(2.10)*	(1.13)	(1.06)	(0.56)	(0.39)
Unemployment	-0.619	-0.212	0.180	0.129	0.343	0.014	0.926	0.450	0.747	0.372
	(1.02)	(0.48)	(0.46)	(0.44)	(0.39)	(0.02)	(2.97)**	(1.88)*	(1.52)	(1.09)
National income per capita	-0.001	0.000	-0.000	0.000	-0.000	0.000	0.000	0.000	0.000	0.000
	(0.56)	(0.56)	(0.08)	(0.67)	(0.18)	(0.32)	(0.89)	(1.52)	(0.55)	(0.80)
Age dependency ratio	0.006		-0.186		-0.233		0.098		0.728	
	(0.02)		(0.84)		(0.62)		(0.24)		(2.19)**	
De-industrialisation	0.280		0.101		0.121		-0.207		-0.178	
	(1.58)		(0.43)		(0.42)		(0.60)		(0.83)	
Female labour force participation	0.082		0.126		0.199		0.348		0.109	
	(0.81)		(1.09)		(1.43)		(2.36)**		(0.64)	
Constant	-0.446	9.007	8.775	6.922	6.878	12.579	-10.214	5.179	-20.224	13.868
	(0.02)	(1.15)	(0.44)	(0.70)	(0.31)	(1.00)	(0.62)	(0.81)	(1.19)	(2.93)***
Observations	21	21	21	21	21	21	21	21	21	21
R-squared	0.43	0.26	0.40	0.32	0.29	0.14	0.38	0.16	0.26	0.04

Notes: Robust t statistics in parentheses. * Significant at 10 per cent. ** Significant at 5 per cent. *** Significant at 1 per cent.

Table 3. Impact of trade openness on public spending, public social expenditure and social transfer payments, 21 OECD countries, 1980–2004

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent variable	Δ Total public spending		Δ Public social spending		Δ Spending on social transfers		Δ Non-social spending	
Specification	First differences	ECM with country FE	First differences	ECM with country FE	First differences	ECM with country FE	First differences	ECM with country FE
Lagged dependent variables								
Total public spending, lagged level	−0.0435 (4.42)***	−0.1923 (7.63)***						
Public social spending, lagged level			−0.0239 (3.08)***	−0.1444 (4.28)***				
Spending on social transfers, lagged level					−0.0049 (0.56)	0.0270 (1.35)		
Non-social spending, lagged level							−0.0831 (5.57)***	−0.2477 (9.79)***
Trade openness								
Δ Trade openness	−0.1475 (3.52)***	−0.1030 (3.24)***	−0.0742 (3.09)***	−0.0439 (1.96)*	−0.0418 (3.04)***	−0.0273 (2.50)**	−0.0611 (2.20)**	−0.0564 (2.23)**
Trade openness, lagged level		−0.0502 (2.95)***		−0.0082 (0.61)		−0.0129 (2.03)**		−0.0418 (3.08)***
Controls (other independent variables)								
Δ Unemployment rate	0.5445 (5.21)***	0.5148 (5.53)***	0.2897 (4.95)***	0.2721 (4.82)***	0.2601 (7.08)***	0.1818 (5.41)***	0.2657 (3.52)***	0.2481 (3.25)***
Unemployment rate, lagged level		−0.0943 (1.90)*		−0.0780 (2.48)**		−0.1031 (5.53)***		−0.0031 (0.08)
Δ Inflation (CPI)	0.0604 (1.22)	0.0220 (0.48)	0.0178 (0.85)	−0.0256 (1.22)	0.0270 (1.63)	0.0350 (2.43)**	0.0370 (1.02)	0.0631 (1.66)*
Inflation (CPI), lagged level		0.0084 (0.26)		−0.0473 (2.67)***		0.0225 (1.70)*		0.0801 (2.73)***

Table 3. Continued.

Dependent variable	Δ Total public spending		Δ Public social spending		Δ Spending on social transfers		Δ Non-social spending	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Specification	First differences	ECM with country FE	First differences	ECM with country FE	First differences	ECM with country FE	First differences	ECM with country FE
Δ National income per capita	−0.0006	−0.0008	−0.0004	−0.0005	−0.0002	−0.0002	−0.0003	−0.0004
	(4.44)***	(6.69)***	(4.88)***	(6.08)***	(3.40)***	(4.24)***	(2.61)***	(3.72)***
National income per capita, lagged level		−0.0000		0.0000		0.0000		−0.0001
		(0.84)		(0.96)		(0.92)		(1.64)
Δ Age dependency ratio	0.1746	0.1511	0.0741	0.1560	0.0483	0.0624	0.0881	−0.0212
	(1.38)	(1.19)	(1.01)	(1.96)*	(0.96)	(1.13)	(0.86)	(0.18)
Age dependency ratio, lagged level		0.0204		0.0117		−0.0121		0.0165
		(0.74)		(0.65)		(1.10)		(0.69)
Δ De-industrialisation	0.1965	0.1740	0.0271	0.0299	0.0915	0.0770	0.1355	0.1411
	(2.17)**	(1.96)*	(0.59)	(0.69)	(2.66)***	(2.47)**	(1.76)*	(1.77)*
De-industrialisation, lagged level		0.1365		0.0340		0.0684		0.1382
		(2.72)***		(1.38)		(3.83)***		(2.99)***
Maastricht effect	−0.0734	−0.7102	−0.0628	−0.2339	0.0121	−0.2158	−0.0054	−0.4902
	(0.32)	(2.93)***	(0.56)	(1.82)*	(0.16)	(2.73)***	(0.03)	(2.49)**
Time trend	−0.0115	0.0028	0.0091	−0.0263	−0.0020	−0.0437	−0.0315	−0.0043
	(0.67)	(0.06)	(1.12)	(0.66)	(0.31)	(2.54)**	(2.59)***	(0.10)
Constant	2.6863	−0.7702	0.9417	0.5229	0.5920	−2.8724	2.5367	−3.7762
	(5.45)***	(0.24)	(5.50)***	(0.24)	(6.24)***	(1.92)*	(5.73)***	(1.14)
R^2	0.37	0.52	0.31	0.42	0.43	0.60	0.21	0.37
Observations	484	484	482	482	485	485	466	466
Number of countries	21	21	21	21	21	21	21	21

Notes: z statistics in parentheses. * Significant at 10 per cent. ** Significant at 5 per cent. *** Significant at 1 per cent.

includes the controls and the measure of trade openness in first differences (changes); and the second specification is an error-correction model (ECM) that allows us to separate transitory from long-term effects.[12]

Before we look at the impact of openness, a brief comment on the performance of control variables is in order. For the most part, the control variables behave as expected. Increases in unemployment, inflation and the age dependency ratio are generally associated positively with increases in public spending. Changes in the national income per capita are negatively associated with changes in spending, exhibiting an anti-cyclical relationship to spending (i.e., lower growth results in higher spending and vice versa). De-industrialisation is shown to be an important driving force behind increases in spending, confirming Iversen and Cusack (2000). Membership in the EU (the 'Maastricht effect') has a depressing impact on public spending. The time trend variable shows a significant negative trend in the case of non-social spending, hinting at the relevance of Pierson's (1994, 2001) theses about the resilience of welfare-state spending. The R^2 is around 0.4 for most models, which is quite high given that the models are specified in first differences.[13]

Changes in trade openness exhibit a constant and statistically highly significant negative association with changes in public spending. The negative impact of trade openness on spending holds, independent of the spending category analysed (total public spending in models 1 and 2, public social spending in models 3 and 4, public spending on social transfers in models 5 and 6, or non-social spending as residual category in models 7 and 8 of Table 3). When the coefficients of the simple first-difference models are used, the predicted reduction in spending caused by an increase in openness of roughly 25 percentage points (e.g., Ireland, 1987–2004) is 3.7 per cent of GDP for total public spending, 1.9 per cent for public social spending, 1.0 per cent for social transfers and 1.5 per cent for non-social spending. In comparison, the impact of a similar change in de-industrialisation (Belgium, 1980–2004) is an increase in public spending of 4.7 percentage points.

When relying on the coefficient estimates of the ECM models, the predicted long-term, permanent effect of an increase in openness by 25 percentage points is even larger: 6.5 per cent of GDP for total public spending, and 4.2 per cent of GDP for non-social spending.[14] Except in the case of social spending, trade openness exhibits both short-term and long-term negative effects on changes in spending. Interestingly, when the ECM specification is run without country fixed effects, the long-term coefficients become insignificant, indicating that their explanatory contribution mainly stems from the over-time dimension.

Alternative measures of globalisation

Table 4 contains model specifications using alternative measures of economic globalisation and testing alternative hypotheses (the partisan hypothesis). With regard to measures of economic internationalisation, the most important distinction that has been drawn in the literature is the one between financial openness and trade openness. Garrett (1998a: 805) is right to point out that these are two very different things. I expect trade openness to have a much stronger impact on policy outcomes because it determines the degree to which economic actors (both employers and workers) are exposed to the squalls of international markets. In contrast, financial openness could have a much more limited impact. Admittedly, the opening up of formerly closed domestic financial markets has made the application of certain supply-side-oriented credit policies, which had been an important element of the Scandinavian economic model (Huber & Stephens 1998), more difficult. Yet as a consequence of the maturation of the Single European Market, domestic restrictions to capital mobility have fallen in a lot of OECD countries. Hence, differences between countries in that dimension have disappeared, while variations in the exposure to trade have persisted.

Model 1 in Table 3 employs a more comprehensive measure of economic globalisation: the KOF index of economic globalisation. This index contains information on realised trade and capital flows as well as on domestic restrictions to capital mobility, based on IMF Annual Reports.[15] The KOF index is negatively associated with public spending, but the level of statistical significance is lower than in the case of trade openness (see Table 2). This indicates that trade openness is a more accurate predictor of changes in spending than the comprehensive KOF index.

Model 2 shows that there is no statistically discernible relationship between spending and realised capital mobility, measured as net capital transfers from other countries in terms of percentages of GDP. We do find a negative association – that is, increases in capital transfers across borders are associated negatively with changes in spending – but the coefficient fails to meet common standards of statistical significance. This finding buttresses the presumption that trade openness is more consequential for financial openness than for policy outcomes.

Another variable discussed in the literature is country size.[16] The early studies conducted in line with the compensation thesis explicitly recognised the importance of country size in the political construction of a compensatory welfare state (Katzenstein 1985). As well as politics, there are other reasons for why country size and trade openness might be related.[17] First, the same absolute volume of trade represents a larger share of GDP in a small economy than

Table 4. Alternative measures of economic globalisation and alternative hypotheses

Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
							Δ Public social spending	
	Δ Total public spending						First differences	ECM with country FE
	First differences				ECM with country FE			
Lagged dependent variables								
Total public spending, lagged level	−0.0466 (4.57)***	−0.0480 (4.54)***	−0.0435 (4.39)***	−0.0435 (4.37)***	−0.1923 (7.65)***	−0.1919 (7.51)***		
Public social spending, lagged level							−0.0232 (3.04)***	−0.1438 (4.27)***
Openness and alternative measures of economic internationalisation								
Δ Economic globalisation (KOF index)	−0.0413 (1.20)							
Δ Capital transfers		−0.3239 (1.33)						
Δ Trade openness, corrected for country size			−0.1367 (3.24)***					
Δ Trade openness				−0.1538 (3.72)***	−0.1024 (3.23)***	−0.1098 (3.52)***	−0.0663 (2.57)**	−0.0435 (1.93)*
Trade openness, lagged level					−0.0495 (2.89)***	−0.0477 (2.75)***		−0.0077 (0.56)
Partisan variables								
Δ Social Democratic participation in government (moving average)				−0.0033 (0.21)			0.0093 (0.93)	

Table 4. Continued.

Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Δ Total public spending						Δ Public social spending	
	First differences				ECM with country FE		First differences	ECM with country FE
Δ Openness * Social Democrats				0.0003 (0.56)			-0.0003 (0.81)	
Δ Social Democratic cabinet share in government					0.0014 (0.49)	-0.0107 (1.34)		0.0007 (0.44)
Social Democratic cabinet share in government, lagged level					0.0005 (0.31)	-0.0008 (0.14)		0.0004 (0.38)
Δ Interaction: Social Democratic cabinet share * openness						0.0004 (1.63)		
Interaction (Social Democrats * openness), lagged level						0.0000 (0.22)		
Controls								
Δ Unemployment rate	0.5225 (4.67)***	0.5094 (4.08)***	0.5586 (5.31)***	0.5464 (5.26)***	0.5176 (5.61)***	0.5119 (5.51)***	0.2925 (5.06)***	0.2739 (4.89)***
Unemployment rate, lagged level					-0.0919 (1.83)*	-0.0959 (1.90)*		-0.0765 (2.43)**
Δ Inflation (CPI)	0.0374 (0.73)	-0.0072 (0.16)	0.0597 (1.20)	0.0608 (1.22)	0.0212 (0.46)	0.0192 (0.41)	0.0187 (0.89)	-0.0261 (1.24)
Inflation (CPI), lagged level					0.0084 (0.25)	0.0098 (0.30)		-0.0471 (2.65)***

Δ National income per capita	−0.0007	−0.0007	−0.0006	−0.0009	−0.0009	−0.0004	−0.0005
	(4.66)***	(4.58)***	(4.36)***	(6.66)***	(6.71)***	(4.84)***	(6.10)***
National income per capita, lagged level				−0.0000	−0.0000		0.0000
				(0.81)	(0.63)		(0.98)
Δ Age dependency ratio	0.2173	0.1838	0.1684	0.1500	0.1423	0.0804	0.1555
	(1.68)*	(1.45)	(1.33)	(1.19)	(1.12)	(1.09)	(1.96)*
Age dependency ratio, lagged level				0.0188	0.0212		0.0105
				(0.68)	(0.76)		(0.58)
Δ De-industrialisation	0.2217	0.2066	0.1988	0.1724	0.1705	0.0269	0.0286
	(2.34)**	(2.27)**	(2.21)**	(1.95)*	(1.90)*	(0.59)	(0.66)
De-industrialisation, lagged level				0.1359	0.1411		0.0331
				(2.73)***	(2.74)***		(1.37)
Maastricht effect	−0.1489	−0.0826	−0.0906	−0.7269	−0.7278	−0.0699	−0.2423
	(0.61)	(0.36)	(0.39)	(2.94)***	(2.89)***	(0.62)	(1.87)*
Time trend	−0.0131	−0.0107	−0.0109	0.0023	−0.0069	0.0094	−0.0264
	(0.73)	(0.61)	(0.62)	(0.05)	(0.12)	(1.15)	(0.66)
R²	0.35	0.37	0.38	0.52	0.53	0.31	0.43
Constant	2.9159	2.6514	2.6707	−0.7171	−1.2207	0.9234	0.5849
	(5.81)***	(5.35)***	(5.35)***	(0.22)	(0.37)	(5.41)***	(0.28)
Observations	484	484	484	484	484	482	482
Number of countries	21	21	21	21	21	21	21

Notes: z statistics in parentheses. * Significant at 10 per cent. ** Significant at 5 per cent. *** Significant at 1 per cent.

in a large economy. Second, small countries can better tailor industrial and economic policies to the needs of the exposed sector and so develop a stronger export orientation. Third, the size of the domestic market, and therefore the scope of trade within the country, is naturally more limited in smaller countries. To correct for the 'small country' effect, Bretschger and Hettich (2002: 705) propose to regress openness on country size[18] and then use the residuals of this regression as the indicator of trade openness (net of the 'small country' effect). This procedure was performed for model 3 in Table 3. The impact of trade openness on spending remains practically unchanged. Thus, country size does not mitigate the negative association between openness and spending.

Finally, I look at the importance of partisan factors. A sizable body of literature has argued that domestic political institutions and partisan politics shape and filter the impact of globalisation on policy outcomes (Garrett 1998a, 1998b; Swank 1998, 2002). The empirical evidence compiled in the present analysis should not be read as a complete refutation of the insights gained in this literature. The purpose of the current enterprise is to put the relationship between domestic politics and economic internationalisation into a broader perspective. While divergence of national outcomes and responses might persist, this divergence swims on an underlying current, which encompasses the whole OECD world. This becomes clear when looking at models 4, 5 and 6 in Table 3. From the very broad perspective of aggregate data analysis, the partisan composition of the government[19] has little impact on the dynamics of public spending. The impact of trade openness, in contrast, remains virtually unchanged. The interaction term between Social Democratic government participation and openness equally fails to reach common levels of statistical significance. Similar results can be observed when social spending is taken as the dependent variable instead of public spending (models 7 and 8 in Table 4).

Conclusions

The aim of this article is to update the discussion on the association between openness and spending. I started by noting a peculiar bias in the literature in favour of the compensation thesis and an empirical focus on the 1980s and 1990s. By extending the time period of observation to 2003/2004, I was able to get a more accurate picture of the long-term effects of increased globalisation. This extension of the period of observation is more than a technical issue because it can be expected that the effects of increased economic internationalisation take time to percolate through the complex processes of policy making, and injudiciously 'pooling' observations from the 1960s to the early

1990s might obscure the true impact of the current phase of intensified economic globalisation.

Second, it is necessary to distinguish between the effects of openness in the cross-sectional and over-time dimensions. Differences in levels of openness might be seen as remnants of an era in which economic internationalisation was more a consequence of domestic politics and could be cushioned by an interventionist welfare state, whereas changes in openness during the 1980s and 1990s are more strongly related to a new phase of intensified and more encompassing internationalisation, in which the focus moves from the domestic to the international level. In repeated cross-sectional regressions, I found evidence that, in the 1980s, open economies indeed went along with a larger welfare state and public sector in general, but that this association decayed over the course of the 1990s. When looking at the impact of changes in openness on changes in spending, we find a strong and statistically robust association between increases in economic openness and decreases in public spending across a variety of spending types.

However, the findings of this article should not be read as a straightforward corroboration of the 'efficiency' logic, despite a seeming congruence in empirical predictions. This is because the 'theory' behind the efficiency thesis remains too unspecified. The picture of corporate bosses breaking into cabinet meetings and bullying governments to lower taxes and spending is too simplistic. The effects of increased economic openness are more diffuse and harder to detect. Instead of highly publicised, head-on clashes of interest between governments and mobile capital owners, we might be observing the aggregated effects of a plurality of small and incremental shifts in the balance of power. Processes of de-industrialisation and shifts in power resources between capital and labour might be related to the forces of economic globalisation to a greater extent than recognised in the literature. Still, it is important to keep in mind that the evidence presented here is based on the analysis of aggregate data by means of regression techniques and cannot fully show whether the relationship between openness and spending is actually causal or merely a correlation. The causal claim, at least, has received some support from a number of qualitative studies on issues like taxation, the welfare state and industrial relations (e.g., Genschel 2002; Scharpf 1991; Scharpf & Schmidt 2000).

What are the consequences for the literature on globalisation and spending? Recently, significant efforts have been undertaken to improve the political underpinnings of the compensation argument (Burgoon 2001; Hays et al. 2005; Mares 2004, 2005; Kim 2007), but the findings of this article suggest that the literature may have accepted too easily the existence of the compensation effect as a given. This is not to say that it is not a useful enterprise to look more

closely at the politics and processes of coalition formation in relation to increased economic internationalisation, but the dichotomy of the 'compensation thesis' versus the 'efficiency thesis' should be overcome. This article has shown that disentangling the effects of openness in the cross-sectional and over-time dimensions enhances our understanding of the complementarity of these two approaches. The compensation argument was a central mechanism at work in the small open economies during the 1970s and 1980s, as Cameron (1978) and Katzenstein (1985) have rightly pointed out. This mechanism, however, has been eroded over time by the dynamics of economic integration.

Finally, to put the compensation argument into perspective must not mean that we should automatically assume a full-scale convergence of policy outcomes or a 'race to the bottom' in public spending. National diversity will persist, and domestic political institutions and partisan politics will most likely continue to matter. The purpose of this article was to point out that national diversity plays out on the basis of an underlying current.[20] This underlying current is the force of economic globalisation, which has left its mark on the politics of public spending.

Appendix

Data sources and definitions

Public spending: Total disbursements of government, per cent of GDP. Source: OECD Economic Outlook Database.

Public social expenditure: Total public social expenditure, per cent of GDP. Source: OECD Health Data 2004, 2007.

Public spending on social transfers: Social benefits paid by government as percentage of GDP. Source: OECD Economic Outlook Database.

Trade openness: Average between exports and imports as percentage of GDP. Source: OECD Factbook 2006.

Unemployment: Unemployment rate, commonly used definitions. Source: OECD Economic Outlook Database.

Inflation: Year-to-year percentage change of Consumer Price Index. Source: OECD Historical Statistics, OECD Economic Outlook Database.

National income per capita: National income per capita, US$, current prices, PPP. Source: OECD Factbook 2007.

De-industrialisation: 100 minus sum of share of employment in agriculture and industry (in per cent of total labour force). Source: own calculations based on OECD Labour Force Statistics 2007.

GDP, volume: Gross domestic product, volume, 2000 Constant PPP. Source: OECD Economic Outlook Database.

Female labour force participation: Female total labour force in percentage of population from 15–64 years. OECD: Labour Market Statistics 02/2006.

Age dependency ratio: Age dependency ratio: population 0–14 & 65+ /population 15–64 years old. Source: OECD Health Data 2007.

Cabinet share of Social Democrats: Share of Social Democratic ministers in government cabinet. Source: Schmidt (2007).

Capital transfers: Net capital transfers from the rest of the world as percentage of GDP. Source: Own calculations based on data OECD National Accounts Database and OECD Economic Outlook database.

Index of economic gobalisation: KOF index of economic globalisation. Source: Dreher (2006).

Table A1. Descriptive statistics of main variables

|	Mean	Standard deviation	Minimum	Maximum
Total public spending (% of GDP)				
Overall	46.28122	8.557076	25.47867	72.4493
Between		7.787608	34.55732	62.95075
Within		4.023979	33.77435	60.35675
Public social spending (% of GDP)				
Overall	20.48353	5.326615	8.9	36.2
Between		5.002014	13.2375	30.85
Within		2.120555	14.87937	30.17937
Social transfer spending (% of GDP)				
Overall	11.24769	4.64769	.8110202	25.48701
Between		2.988009	5.526959	15.89806
Within		3.591239	.4409071	25.10568
Non-social public spending (% of GDP)				
Overall	25.7399	4.718498	15.80395	41.34354
Between		3.753038	16.75659	32.35252
Within		3.163433	15.66434	41.10684
Trade openness (average imports and exports, % of GDP)				
Overall	32.56114	15.73555	8	92.1
Between		15.38038	10.528	70.784
Within		4.678278	16.32914	59.92914
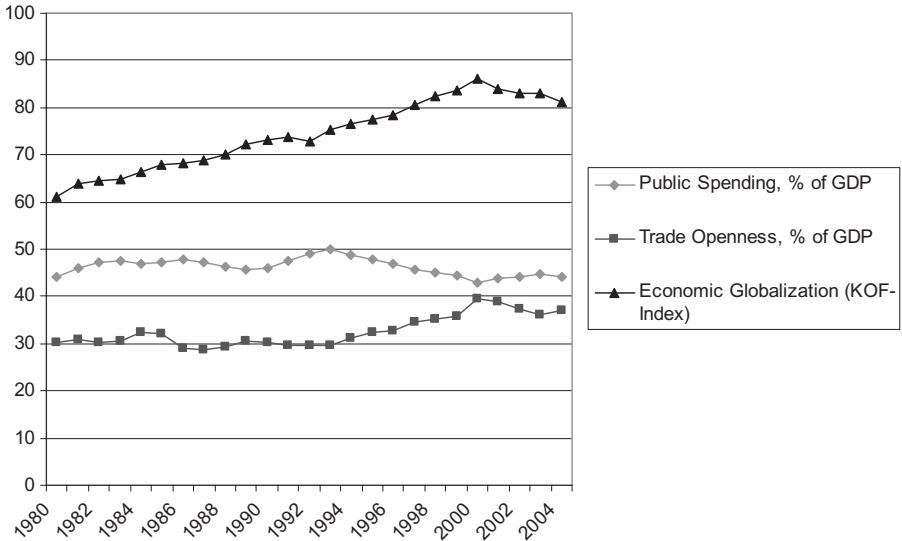
Figure A1. Public spending, trade openness and economic globalisation in 21 OECD countries, 1980–2004.
Notes: Values are averages across the 21 OECD countries in the sample. Trade openness is the average of imports and exports (as percentage of GDP). Economic globalisation is a composite index of cross-border flows of goods and capital as well as restrictions on flows (see Dreher (2006) and the section entitled 'Alternative measures of globalisation' for details).

Notes

1. Economic openness and external risk do not necessarily go hand in hand. As Kim (2007) has shown recently, external risk (volatility) is indeed associated with different forms of domestic volatility. However, there is no tight relationship between trade openness and external risk.
2. The exception is Hays et al. (2005), who look at the time period 1960–2000.
3. Another exception is Kaufman and Segura-Ubiergo (2001). They find a negative impact of economic openness on (social) spending as well, but they look at Latin American countries, not the OECD world.
4. Castles (2007: 14), summarising the findings of a range of studies on diverse policy fields (core spending, public subsidies, education, public debt); see also Adelantado and Calderón Cuevas (2006) for evidence of convergence in social spending.
5. See Streeck & Thelen (2005) for a similar argument.
6. Methodologically, a level specification with country fixed effects and a lagged dependent variable comes quite close to a pure first-difference specification.
7. For sources and definitions, see the Appendix.
8. This variable takes the value of 1 for EU member countries after 1992, and zero elsewhere.

9. A third specification, which is popular in the literature, is a dynamic model in levels with a lagged dependent variable and fixed effects. This specification has received a considerable amount of methodological criticism recently (Plümper et al. 2005; Kittel & Winner 2005) because of problems of non-stationarity, bias because of the fixed effects and the non-theoretical modelling of policy inheritance effects via the lagged dependent variable. Therefore, it was not used as primary specification here. Nevertheless, the main finding of the article (a negative association between trade openness and public/social/transfer spending) is robust even in that specification (results can be provided upon request).

10. The use of a simple first difference specification does have two disadvantages: first, it assumes that differences in levels of independent variables do not matter (i.e., there is no difference in the impact of an increase in openness between a little exposed country and a highly exposed one); and second, it assumes that all changes in the independent variables materialise immediately as changes in the dependent variable. Thus, it does not take into account more complex lag structure (see, for further elaboration, Plümper et al. 2005: 333; Beck 1991).

11. Due to missing data for the 1980s, New Zealand and Switzerland had to be omitted from the sample.

12. Alternatives were tested to model the complexity of the dynamic association between spending and openness (see also Note 9 above): first, a more complex lag structure of openness (lags of more than one year); and second, period dummies and their interaction with openness. In the end, I decided against using these alternatives because they did not produce any coherent results or increase the explanatory power of the models, but would have introduced an element of arbitrariness into the analysis.

13. R^2 drops to 0.21 in the case of non-social spending, which is to be expected because this is a large, residual category.

14. These predictions are calculated by dividing the coefficient of the lagged-level variable by the coefficient of the lagged dependent variable (and then multiplying by 25 to simulate the experience of Ireland) (see Iversen & Cusack 2000: 330–331). I did not calculate predicted values for the cases of social spending (insignificant lagged level coefficient) and transfer spending (insignificant coefficient for the lagged dependent variable).

15. Thus, the KOF index continues in the tradition of Quinn's index of financial openness (Quinn 1997; Quinn & Inclán 1997), which has been widely used in the globalisation literature.

16. In our sample, the correlation between trade openness and country size (measured as the size of the economy) is –0.5.

17. The following is drawn from Bretschger and Hettich (2002: 704).

18. I use the natural logarithm of the size of the economy (volume of GDP) as a predictor.

19. The operationalisation of partisan effects in a first-difference specification is not straightforward. Obviously, it is not sufficient to look at changes in government participation in the current year only, because that would assume that a change in the partisan composition has a very short-term and then dramatic impact on policy output. Therefore, I use a moving average of Social Democratic government participation (with a window of five years and decreasing weights) instead of the current composition of the government. In a second step, first differences in the moving average are calculated and then used as independent variables in the model. In the ECM specifications (models 5,

6, and 8 of Table 4), I rely on more conventional measures of partisanship (i.e., cabinet shares of Social Democrats in the current year).

20. A similar argument was made by Crouch and Streeck (1997) over ten years ago.

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